AMENDMENTS TO THE DRAWINGS

The Office Action objected to the drawings for quality and duplication of a reference numeral. By this Amendment, Applicants submit replacement drawings. No new matter has been added. Applicants respectfully request that the Examiner withdraw the objection.

Attachment: Replacement Drawings (14 sheets)

REMARKS

Claims 1-41 are pending. By this Amendment, claims 1-31 stand withdrawn from consideration. By this Amendment, claims 33, 34, 38 and 39 are cancelled, claims 32, 35-37 and 40-41 are amended and new claims 42 and 43 are added.

Election/Restrictions

Applicants acknowledge that claims 1-31 are withdrawn from consideration and claims 32-41 were elected without traverse.

Claim Objections

The Office Action objected to claim 32 over the phrase "thus allowing determination of the position of boundaries, in the tissue inclusions in the tissue or both." By this Amendment, Applicants have amended claim 2 to resolve the objected to language. Applicants respectfully request that the Examiner withdraw the rejection.

Drawings

The Office Action objected to the drawings for quality and duplication of a reference numeral. By this Amendment, Applicants submit replacement drawings. No new matter has been added. Applicants respectfully request that the Examiner withdraw the objection.

35 U.S.C. § 102

The Office Action rejected claims 32-33 and 36-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,454,761 to Freedman. By this Amendment, Applicant has amended independent claims 32 and 37 to recite limitations that are not disclosed or suggested by Freedman. Applicant respectfully traverses the rejection.

The Freedman references relates to three dimensional imaging of the cornea by means of ocular coherence tomography (OCT). The data acquired by OCT are used to control laser ablation. The three dimensional imaging and laser ablation are performed by totally independent devices and independent laser sources. Reference to Figures 1 and 3 of Freedman reveals that treatment beam 58 arises from a irradiater 56 and laser generator 54 while laser diode 68, cited in the Office Action, generates an illumination beam. Accordingly, the illumination laser radiation and the treating laser radiation arise from entirely different sources according to the disclosure of Freedman. Further, whatever scanning occurs in Freedman is not three dimensional as currently claimed but limited to the X-Z plane. See Column 7, Lines 36-51. Accordingly, independent claims 32 and 35, as amended, are patentable over Freedman for at least these reasons. Claims 35, 36 and 42 depend from claim 32 and should be patentable for at least the same reasons as claim 32. Claims 40, 41 and 43 depend from claim 37 and should be patentable for at least the same reasons as claim 32. Applicants respectfully request that the Examiner withdraw the rejections.

35 U.S.C. § 103

The Office Action rejected claims 34, 35 and 39-41 under 35 U.S.C. § 103 (a) as being unpatentable over Freedman, further in view of U.S. Patent 6,613,041 to Schründer.

As discussed above, amended independent claims 32 and 37 recite limitations not disclosed or suggested by the Freedman reference. Further, these limitations are not disclosed or suggested by the Schründer reference. In particular, Applicants note that neither Freedman nor Schründer disclose or suggest that the positions of boundaries in tissues are detected or that measurement points are filtered.

Schründer discloses in Figure 1, a device for measuring the cornea that expands radiation from a laser source and transforms it into a slit type illumination by using a mask identified by reference numeral 4. The laser radiation is selected so that it excites fluorescence in the cornea. Accordingly, the laser radiation identified by reference numeral 1, is excitation radiation. Fluorescence is excited in the corneal tissues and a radiation from this fluorescence is guided to a detector identified by reference numeral 12 through a separate beam path.

Further, neither Freedman nor Schründer utilize three dimensional scanning as now claimed in the independent claims. The invention as presently claimed explicitly recites a three dimensional scanning that occurs by changing the focal point of illumination laser radiation within the tissue in three dimensions. Further, the amended claims recited that a position of boundaries in the tissues are detected by filtering out points of measurement at which predefined values are detected for the tissue-specific signal. Neither of these recited limitations are disclosed or suggested by Freedman or Schründer.

Claim 35

Amended claim 35 now recites that the target points are selected from the measurement points and accordingly form a subgroup of the measurement points. Neither Freedman nor Schründer disclose or suggest this limitation. Accordingly, claim 35 should be patentable for at least this additional reason. Applicants respectfully request that the Examiner withdraw the rejection.

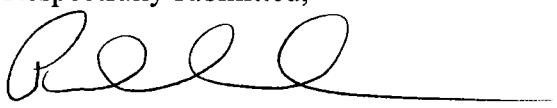
New claims 42 and 43

New dependent claims 42 and 43 recite that detecting tissues specific signals comprises the detecting back scattered illumination radiation. This limitation is not disclosed or suggested by Schründer since Schründer utilizes excitation and fluorescence and detects fluorescence radiation from the excited material. Accordingly, claims 42 and 43 should be patentable for at least this additional reason.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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